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CHACKO, SUNIL				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,355

Applicant(s)

TAKAMATSU ET AL.

Examiner

SUNIL CHACKO

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
Paper No(s)/Mail Date 07/16/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-13 are presented for examination.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS submitted on 07/16/2006. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 13 is rejected due to the fact that a *program* is not on of the Statutory Categories. Please see MPEP 2106.01 Computer-related Nonstatutory Subject Matter.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1, 6-7, & 11-13 are rejected under U.S.C. 102(e) as being unpatentable over Boldon (Patent US # 7,145,682 B2)

As to Claim 1

Boldon teaches a *printing apparatus connected to an external device that can instruct printing of image data, said printing apparatus comprising:* (See Fig. 2)

- *an obtainment unit operable to obtain at least one of image data and firmware data, the firmware data being required for updating firmware;* (See column 3 lines 10-13)
- *a judgment unit operable to judge whether to update firmware or to print image data; and an execution unit operable to update the firmware using the firmware data obtained by said obtainment unit,* (See Fig. 2 element 222 & column 4 lines 5-10)
- *in the case where said judgment unit judges that the firmware should be updated, and operable to print the image data obtained by said obtainment unit, in the case where said judgment unit judges that the image data should be printed.* (Column 4 lines 49-52)

As to Claim 6 (which depends on Claim 1)

Boldon further teaches *the printing apparatus further comprising:*

- *a reception unit operable to receive, from said external device, print content description data which is data written in a language that can be analyzed by said printing apparatus; (See Fig. 2 element 208, See column 3 lines 55-58 & column 4 lines 1-3)*
- *and an analyzing unit operable to analyze the print content description data, (See Fig. 2 element 222 & See column 4 lines 5-10)*
- *wherein said obtainment unit is operable to obtain image data in the case where the analysis of said analyzing unit indicates that a description stating that the image data should be obtained is included in the print content description data, and said judgment unit is operable to judge that the firmware should be updated in the case where firmware data is added in the obtained image data, and operable to judge that the obtained image data should be printed in the case where firmware data is not added in the obtained image data. (Boldon teaches a print job packet which includes image data, firmware updates, & indicator. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52.)*

As to Claim 7

Boldon teaches a firmware updating method for use in a printing apparatus to update firmware of the printing apparatus, the printing apparatus being connected to an

external device that can instruct printing of image data, said method comprising: (See Fig. 2)

- *an obtainment step of obtaining at least one of image data and firmware data, the firmware data being required for updating firmware; (See column 3 lines 10-13)*
- *a judgment step of judging whether to update the firmware or to print the image data; and an execution step of updating the firmware using the firmware data obtained in said obtainment step, (See Fig. 2 element 222 & column 4 lines 5-10)*
- *in the case where it is judged in said judgment step that the firmware should be updated, and printing the image data obtained in said obtainment step, in the case where it is judged in said judgment step that the image data should be printed. (Column 4 lines 49-52)*

As to Claim 11(which depends on Claim 7)

Boldon further teaches the firmware updating method further comprising:

- *a reception step of receiving, from said external device, print content description data which is data written in a language that can be analyzed by said printing apparatus; and (See Fig. 2 element 208, See column 3 lines 55-58 & column 4 lines 1-3)*
- *an analyzing step of analyzing the print content description data, (See Fig. 2 element 222 & See column 4 lines 5-10)*
- *wherein, in said obtainment step, image data is obtained in the case where the analysis in said analyzing step indicates that a description stating that the image*

data should be obtained is included in the print content description data, and in said judgment step, it is judged that the firmware should be updated in the case where firmware data is added in the obtained image data, and it is judged that the obtained image data should be printed in the case where the firmware data is not added in the obtained image data. (Boldon teaches a print job packet which includes image data, firmware updates, & indicator. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52.)

As to Claim 12

Boldon teaches a printing system for allowing printing of image data from a printing apparatus by executing an application program for image printing installed in an external device, wherein said printing apparatus includes: (See Fig. 2)

- *an obtainment unit operable to obtain at least one of image data and firmware data, the firmware data being required for updating firmware;* (See column 3 lines 10-13)
- *a judgment unit operable to judge whether to update the firmware or to print the image data ;and an execution unit operable to update the firmware using the firmware data obtained by said obtainment unit,* (See Fig. 2 element 222 & column 4 lines 5-10)

- *in the case where said judgment unit judges that the firmware should be updated, and operable to print the image data obtained by said obtainment unit, in the case where said judgment unit judges that the image data should be printed.* (Column 4 lines 49-52)

As to Claim 13

Boldon teaches *a program for use in a printing apparatus to update firmware of said printing apparatus, the printing apparatus being connected to an external device that can instruct printing of image data, said program causing a computer to execute:* (See Fig. 2 and column 2 lines 21-32)

- *an obtainment step of obtaining at least one of image data and firmware data, the firmware data being required for updating firmware;* (See column 3 lines 10-13)
- *a judgment step of judging whether to update the firmware or to print the image data; and an execution step of updating the firmware using the firmware data obtained in said obtainment step,* (See Fig. 2 element 222 & column 4 lines 5-10)
- *in the case where it is judged in said judgment step that the firmware should be updated, and printing the image data obtained in said obtainment step, in the case where it is judged in said judgment step that the image data should be printed.* (Column 4 lines 49-52)

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 2-5 & 8-10 are rejected under U.S.C. 103(a) as being unpatentable over Boldon (US Patent 7,145,682 B2) in view of Lay et al. (US 2004/0207868 A1)

As to Claim 2 (which depends on Claim 1)

Boldon further teaches *the printing apparatus, further comprising:*

- *a reception unit operable to receive, from said external device, print content description data which is data written in a language that can be analyzed by said printing apparatus; (See Fig. 2 element 208, See column 3 lines 55-58 & column 4 lines 1-3)*

- *and an analyzing unit operable to analyze the print content description data,*
(See Fig. 2 element 222 & See column 4 lines 5-10)

Boldon does not explicitly teach the limitation of a filename:

- *wherein said judgment unit is operable to judge that the firmware should be updated in the case where the analysis by said analyzing unit indicates that a description stating that image data having a **special filename** should be obtained is included in the print content description data and operable to judge that the image data should be printed in the case where the analysis by said analyzing unit indicates that a description stating that image data having a **special filename** should be obtained is not included in the print content description data, and said obtainment unit is operable to obtain firmware data having a **predetermined filename** instead of the image data having the **special filename** in the case where it is judged that the firmware should be updated, and operable to obtain image data having a **filename** described in the print content description data in the case where it is judged that the image data should be printed.*

Boldon does not explicitly teach a "special filename", however Boldon teaches a print job packet which includes image data, firmware updates, & indicator. However, Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al also teaches that his apparatus keeps track

of file extension, which read on *special filename*, see paragraph 37. Boldon does not explicitly teach the limitation of "*image data having a special filename*" to determine the whether a firmware should be updated or if an image should just be printed. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52. The print job packet would serve this function regardless of the file name. It would have been obvious at the time of the invention for one skilled in the art to combine Boldon in view of Lay et al. because it would provide a user the ability to keep track of the firmware that is updated in the printer.

As to Claim 3 (which depends on Claim 2)

Boldon does not explicitly teach *the printing apparatus*,

- Boldon teaches *wherein said obtainment unit is operable* (See column 3 lines 10-13) but does not teach that it is able to *derive an access path to the firmware data having the predetermined filename, using an access path to the image data having the special filename*. However Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay et al teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al. teaches that the filenames have access path (See paragraph 40). It would have been obvious to one skilled in

the art, at the time of invention to combine Boldon in view of Lay et al. because it would provide a user with the ability to keep track of the firmware that is updated in the printer.

As to Claim 4 (which depends on Claim 2)

Boldon does not explicitly teach *the printing apparatus*,

- *wherein said execution unit is operable to print the image data having the special filename in the case where the obtainment of the firmware data having a predetermined filename fails.*

Boldon does not explicitly teach a "*special filename*", however Boldon teaches a print job packet which includes image data, firmware updates, & indicator. However, Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al also teaches that his apparatus keeps track of file extension, which read on *special filename*, see paragraph 37. Boldon does not explicitly teach the limitation of "*image data having a special filename*" to determine the whether a firmware should be updated or if an image should just be printed. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52. The print job packet would serve this function

regardless of the file name. If the firmware were to fail, the image would still print, using the already installed firmware. It would have been obvious at the time of the invention for one skilled in the art to combine Boldon in view of Lay et al. because it would provide a user the ability to keep track of the firmware that is updated in the printer.

As to Claim 5 (which depends on Claim 2)

Boldon does not explicitly teach *the printing apparatus,*

- *wherein the image data having the special filename is image data regarding firmware updating.*

Boldon does not explicitly teach a "special filename", however Boldon teaches a print job packet which includes image data, firmware updates, & indicator. However, Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al also teaches that his apparatus keeps track of file extension, which read on *special filename*, see paragraph 37. Boldon does not explicitly teach the limitation of "*image data having a special filename*" to determine the whether a firmware should be updated or if an image should just be printed. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52. The print job packet would serve this function

regardless of the file name. If the firmware were to fail, the image would still print, using the already installed firmware. It would have been obvious at the time of the invention for one skilled in the art to combine Boldon in view of Lay et al. because it would provide a user the ability to keep track of the firmware that is updated in the printer.

As to Claim 8 (which depends on Claim 7)

Boldon further teaches *the firmware updating method further comprising:*

- *a reception step of receiving, from said external device, print content description data which is data written in a language that can be analyzed by said printing apparatus; and (See Fig. 2 element 208, See column 3 lines 55-58 & column 4 lines 1-3)*
- *an analyzing step of analyzing the print content description data, (See Fig. 2 element 222 & See column 4 lines 5-10)*

Boldon does not explicitly teach the limitation of a filename:

- *wherein in said judgment step, it is judged that the firmware should be updated in the case where the analysis in said analyzing step indicates that a description stating that image data having a **special filename** should be obtained is included in the print content description data, and it is judged that the image data should be printed in the case where the analysis in said analyzing step indicates that a description stating that image data having a **special filename** should be obtained is not included in the print content description data, and in said obtainment step, firmware data having a **predetermined filename** is obtained*

*instead of the image data having the **special filename** in the case where it is judged that the firmware should be updated, and image data having a **filename** described in the print content description data is obtained in the case where it is judged that the image data should be printed.*

Boldon does not explicitly teach a "special filename", however Boldon teaches a print job packet which includes image data, firmware updates, & indicator. However, Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al also teaches that his apparatus keeps track of file extension, which read on *special filename*, see paragraph 37. Boldon does not explicitly teach the limitation of "*image data having a special filename*" to determine the whether a firmware should be updated or if an image should just be printed. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52. The print job packet would serve this function regardless of the file name. It would have been obvious at the time of the invention for one skilled in the art to combine Boldon in view of Lay et al. because it would provide a user the ability to keep track of the firmware that is updated in the printer.

As to Claim 9 (which depends on Claim 8)

Boldon does not explicitly teach *the firmware updating method*,

- Boldon teaches *wherein, in said obtainment step*, (See column 3 lines 10-13) but does not teach that it is able *an access path to the firmware data having the predetermined filename is derived, using an access path to the image data having the special filename*. However Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating firmware in printers, See Lay et al paragraph 6. Lay et al teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al. teaches that the filenames have access path (See paragraph 40). It would have been obvious to one skilled in the art, at the time of invention to combine Boldon in view of Lay et al. because it would provide a user with the ability to keep track of the firmware that is updated in the printer.

As to Claim 10 (which depends on Claim 8)

Boldon does not explicitly teach *the firmware updating method*,

- *wherein, in said execution step, the image data having the special filename is printed in the case where the obtainment of the firmware data having a predetermined filename fails.*

Boldon does not explicitly teach a "*special filename*", however Boldon teaches a print job packet which includes image data, firmware updates, & indicator. However, Lay et al teaches a "Printer Based File Revision Databasing" that is capable of updating

firmware in printers, See Lay et al paragraph 6. Lay teaches a file management system manager, that keeps track of the various files and file names that are used for firmware updates, See Fig. 2 element 255. Lay et al also teaches that his apparatus keeps track of file extension, which read on *special filename*, see paragraph 37. Boldon does not explicitly teach the limitation of "*image data having a special filename*" to determine the whether a firmware should be updated or if an image should just be printed. Boldon teaches that the print job packet has an indicator which tells the printer if a firmware should be updated. If the print job packet does not set the indicator the firmware is not updated, and the image is printed See Fig. 2 element 226, See Fig. 4 element 404 and 246; See also column 4 lines 49-52. The print job packet would serve this function regardless of the file name. If the firmware were to fail, the image would still print, using the already installed firmware. It would have been obvious at the time of the invention for one skilled in the art to combine Boldon in view of Lay et al. because it would provide a user the ability to keep track of the firmware that is updated in the printer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL CHACKO whose telephone number is (571)270-7221. The examiner can normally be reached on Mon-Thurs 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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